

**Louisiana Department of Environmental Quality (LDEQ)
Office of Environmental Services**

STATEMENT OF BASIS

**Royal Fiberglass Pools, Inc.
Renewal Title V Permit
Breux Bridge, St. Martin Parish, Louisiana
Agency Interest Number: 32855
Activity Number: PER20040001
Draft Permit 2620-00043-V1**

I. APPLICANT:

Company:

Royal Fiberglass Pools, Inc.
1407 Anse Broussard Hwy., Breux Bridge, LA 70517
Approximate UTM coordinates are 666.608 kilometers East and 3284.454
kilometers North, Zone 15

II. FACILITY AND CURRENT PERMIT STATUS:

Royal Fiberglass Pools, Inc., Breux Bridge Terminal 1 manufactures one-piece fiberglass swimming pools using the hand lay-up technique. All pools are built onsite in one of three bays. The air emissions generated from these sources include styrene and other VOC from the curing of resin. The tooling department is also a source of air emissions.

Fiberglass pool fabrication begins with gelcoat being sprayed into a mold and the application of a layer of chop strand mixed with vinyl ester resin. The gelcoat is applied using gel impingement technology. This application method prevents overspray and excess emissions. A hand lay-up follows, spreading layers of fiberglass strand between an isomer resin to the correct thickness. Methyl ethyl ketone peroxide, MEKP, is the promoter for the entire process. Acetone is used as a solvent cleaner. A reclamation unit is used to collect and recycle the used solvent. Insignificant activities include a 300 gallon diesel tank, a 200 gallon acetone tote tank, and two resin tanks, 5,000 gallons and 1,000 gallons, respectively. Royal Fiberglass Pools Inc., Breux Bridge Terminal 1 currently operates under Permit No. 2620-00043-V0, dated July 17, 2000.

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III. PROPOSED PERMIT / PROJECT INFORMATION:

Proposed Permit

A permit application and Emission Inventory Questionnaire were submitted by Royal Fiberglass Pools Inc. on November 23, 2004 requesting a renewal Part 70 operating permit.

Project Description

This permit has been modified to comply with 40 CFR 63, Subpart WWWW, a Maximum Achievable Control Technology (MACT) requirement. The company has also revised emission estimates used in the determination of VOC emissions. Royal Fiberglass Pools, Inc. currently uses the Unified Emission Factors for Open Molding of Composites published by the American Composite Manufacturers Association.

Permitted Air Emissions

Estimated changes in permitted emissions rates for VOC are a result of updated emission factors. The permitted emission rates are in tons per year as follows:

<u>Pollutant</u>	<u>Before</u>	<u>After</u>	<u>Change</u>
PM10	0.11	0.11	0.0
VOC	60.7	40.67*	-20.03

***VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):**

Dimethyl phthalate	0.09
Methyl ethyl ketone	0.18
Methyl methacrylate	6.31
<u>Styrene</u>	<u>34.09</u>
Total VOC	40.67

Regulatory Analysis

This application was reviewed for compliance with the Louisiana Part 70 operating permit program, Louisiana Air Quality Regulations, Louisiana Comprehensive TAP Emission Control Program, NSPS, NESHAP, CAM and PSD regulations.

Louisiana Air Quality Regulations and NSPS

The applicability of the appropriate regulations is straightforward and provided in the Facility Specific Requirements Section of the draft permit, or Table 1 of the draft permit. Similarly, the Monitoring, Reporting and Recordkeeping necessary to demonstrate compliance with the applicable terms, conditions and standards are provided in the Facility Specific Requirements Section of the draft permit.

Prevention of Significant Deterioration Applicability

The current facility does not have the potential to meet the definition of a Major Stationary Source with respect to the Prevention of Significant Deterioration (PSD) regulations.

MACT Requirements

This facility is a minor source of toxic air pollutants (TAPs) pursuant to LAC 33:III.Chapter 51, therefore Maximum Achievable Control Technology and the NESHAP regulations do not apply.

Air Modeling Analysis

Not Applicable. Impact on air quality from the emissions of the facility will be below the National Ambient Air Quality Standards (NAAQS) and the Louisiana Ambient Air Standards (AAS) beyond industrial property.

General Condition XVII Activities

The facility will comply with the applicable General Condition XVII Activities emissions as required by the operating permit rule. However, General Condition XVII Activities are not subject to testing, monitoring, reporting or recordkeeping requirements. For a list of approved General Condition XVII Activities, refer to Section VIII of the draft Part 70 permit.

Insignificant Activities

All Insignificant Activities are authorized under LAC 33:III.501.B.5. For a list of approved Insignificant Activities, refer to Section IX of the draft Part 70 permit.

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IV. PERMIT SHIELDS

A permit shield was requested but is being denied as the request did not explicitly state the federally applicable requirements.

V. PERIODIC MONITORING

Federal regulation 40 CFR 64 Compliance Assurance Monitoring is not applicable to this facility. The facility is not a major source for any regulated air pollutant thereby exempting them from any monitoring.

VI. EXPLANATION FOR EXEMPTION STATUS OR NON-APPLICABILITY OF A SOURCE		
ID No:	Requirement	Notes
Entire Facility	Chemical Accident Prevention Provisions [40 CFR 68] Chemical Accident Prevention and Minimization of Consequences [LAC 33:III. Chapter 59]	EXEMPT. This facility emits below the threshold quantities used to trigger this subpart.
	Protection of Stratospheric Ozone [40 CFR 82]	EXEMPT. There are no applicable CFC chillers/coolers onsite.

VII. STREAMLINED REQUIREMENTS			
Unit or Plant Site	Programs Being Streamlined	Stream Applicability	Overall Most Stringent Program
Royal Fiberglass Pools	None		

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Glossary

Best Available Control Technologies (BACT) - An emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this part which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

CAM - Compliance Assurance Monitoring rule – A federal air regulation under 40 CFR Part 64

Carbon Monoxide (CO) – A colorless, odorless gas, which is an oxide of carbon.

Grandfathered Status- Those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

Hydrogen Sulfide (H₂S) - A colorless inflammable gas having the characteristic odor of rotten eggs, and found in many mineral springs. It is produced by the action of acids on metallic sulfides, and is an important chemical reagent.

Maximum Achievable Control Technology (MACT) - The maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

NESHAP - National Emission Standards for Hazardous Air Pollutants – Toxic air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63

Nitrogen Oxides (NO_x) - Compounds whose molecules consists of nitrogen and oxygen.

Nonattainment New Source Review (NNSR) - A New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. Nonattainment NSR is designed to

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ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

NSPS - New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60

Organic Compound - Any compound of carbon and another element. Examples: Methane (CH₄), Ethane (C₂H₆), Carbon Disulfide (CS₂)

Part 70 Operating Permit- Also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507. Major sources include, but are not limited to, sources which have the potential to emit: ≥ 10 tons per year of any toxic air pollutant; ≥ 25 tons of total toxic air pollutants; and ≥ 100 tons per year of regulated pollutants (unless regulated solely under 112(r) of the Clean Air Act) (25 tons per year for sources in non-attainment parishes).

PM₁₀- Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) - The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – A New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Sulfur Dioxide (SO₂) – An oxide of sulphur.

TAP - Toxic Air Pollutant (LDEQ acronym for air pollutants regulated under LAC 33 Part III, Chapter 51, Tables 1 through 3

Title V permit – See Part 70 Operating Permit.

Volatile Organic Compound (VOC) - Any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.